CARE COMMITTEE

MAY 1989

GRAND CAL RIVER AOC


LEGEND
STATE BOUNDARY
MAJOR ROADS
MAJOR WATER
URBAN AREAS
EXTENT OF AREA OF CONCERN (JUNE 5, 2009)
NOTE: AREA OF CONCERN BOUNDARY AS APPROVED BY THE INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT ON JUNE 5, 2009
0 3,000 6,000 Feet
GRAND CALUMET RIVER, INDIANA AREA OF CONCERN
Great Lakes National Program Office
EPA
CHICAGO
WHITING
EAST CHICAGO
HIGHLAND
HAMMOND
CALUMET CITY
GARY
LAKE STATION
LANSING
INDIANA

CARE COMMITTEE
MISSION STATEMENT

The purpose of the Citizen's Advisory for the Remediation of the Environment (CARE) Committee is to advise IDEM on development and implementation of the Remedial Action Plan (RAP) for the Grand Calumet River, Indiana Harbor Ship Canal and Nearshore Lake Michigan Area of Concern. CARE also will advise other agencies that work with IDEM to ensure consistency and adherence with the REMEDIAL ACTION PLAN and to ensure that these agencies promote the REMEDIAL ACTION PLAN. The REMEDIAL ACTION PLAN is a requirement of the 1987 Great Lakes Water Quality Agreement that mandates an ecosystem approach for restoring beneficial uses.

Specifically, the purpose of CARE is to:

- Advise IDEM on the REMEDIAL ACTION PLAN
- Review components of the REMEDIAL ACTION PLAN
- Advocate and encourage agencies' actions to be consistent with the REMEDIAL ACTION PLAN
- Review State resources pertaining to the REMEDIAL ACTION PLAN
- Advise IDEM on the adequacies of RAP components
- Recommend a time-line for implementation of the REMEDIAL ACTION PLAN
- Promote activities consistent with the REMEDIAL ACTION PLAN
- Monitor and track implementation, and suggest appropriate action

REMEDIAL ACTION PLAN STAGE II

INTERNATIONAL JOINT COMMISSION SUBMITTAL DOCUMENT

December 1997

ACTIVITIES & BENEFICIAL USES SORTED AND ARRANGED TO DETERMINE AREAS OF IMPACT LEVELS

		11 Degradation of Aesthetics	14 Loss of Fish & Wildlife Habitat	3 Degraded Fish & Wildlife Populations	5 Bird or Animal Deformities or Reproductive Problems	2 Tainting of Fish & Wildlife Flavor	1 Restrictions on Fish & Wildlife Consumption	4 Fish Tumors or Other Deformities	6 Degradation of Benthos	9 Restrictions on Drinking Water Consumption or Taste & Odor Problems	7 Restrictions on Dredging Activities	13 Degradation of Phytoplankton & Zooplankton Populations	8 Eutrophication or Undesirable Algae	12 Added Costs to Agriculture or Industry	10 Beach Closings	KEY IMPLEMENTATION ELEMENTS: OWNER or PRINCIPAL DRIVER (Person or Organization)	PLANS IN PLACE (Yes, No or TBD)	INDICATORS ESTABLISHED (Yes, No or TBD)	START DATE (Date or TBD)	END DA (Date or
6.	Removal Action by LTV Steel	●	●	●	●	●	●	●	●	●	●	●	●	●	○	USEPA / LTV	Yes	Project Completed		1997
15.	Superfund	●	●	●	●	●	●	●	●	●	●	●	●	●	□	USEPA	Yes	Yes	In Existence	Continu
3.	U.S. Steel (water decree)	●	●	●	●	●	●	●	●	●	●	●	●	●	□	USEPA	Yes	TBD	1998	Continu
5.	Inland Steel Sediment Characterization Study in the IHSC	●	●	●	●	●	●	●	●	●	●	●	●	●	□	USEPA / INLAND	Yes	Yes	1997	Continu
1.	Natural Resource Damage Assessment	●	●	●	●	●	●	●	●	●	●	●	●	○	○	IDEM / IDNR / USFWS / NOAA / NPS	Yes	TBD	1996	Continu
8.	U.S. Army Corps of Engineers' Indiana Harbor and Canal Dredging Project	●	●	●	●	●	●	●	●	●	●	○	●	●	○	ACoE	Yes	TBD	1972	2030
25h.	Prevent and Clean Up Contaminated Sites	●	●	●	●	●	●	●	○	●	○	●	●	●	●	IDEM / USEPA	Yes	2 Yr. EnPPA	To be Negotiated	To b Negotia
4.	U.S. Steel (sediment)	●	●	●	●	●	●	●	●	●	●	●	●	○	□	USEPA / USS	Yes	TBD	1998	2003
7.	Gary Sanitary District (GSD)	●	●	●	●	●	●	●	●	●	●	●	●	○	□	USEPA / IDEM / GSD	No	No	TBD	TBD
8.	Amoco Soil characterization Work Plan and Ground Water Evaluation	●	●	●	●	●	●	●	●	●	●	●	●	○	□	IDEM / AMOCO	Yes	Yes	1991	Contin
9.	Amoco Agreed Order	●	●	●	●	●	●	●	●	●	●	●	●	○	□	IDEM / AMOCO	Yes	Yes	In Existence	202

Voluntary Action Initiated Through the RAP

Voluntary Action Supporting RAP Goals

Federal, State & Local Actions Supporting the RAP

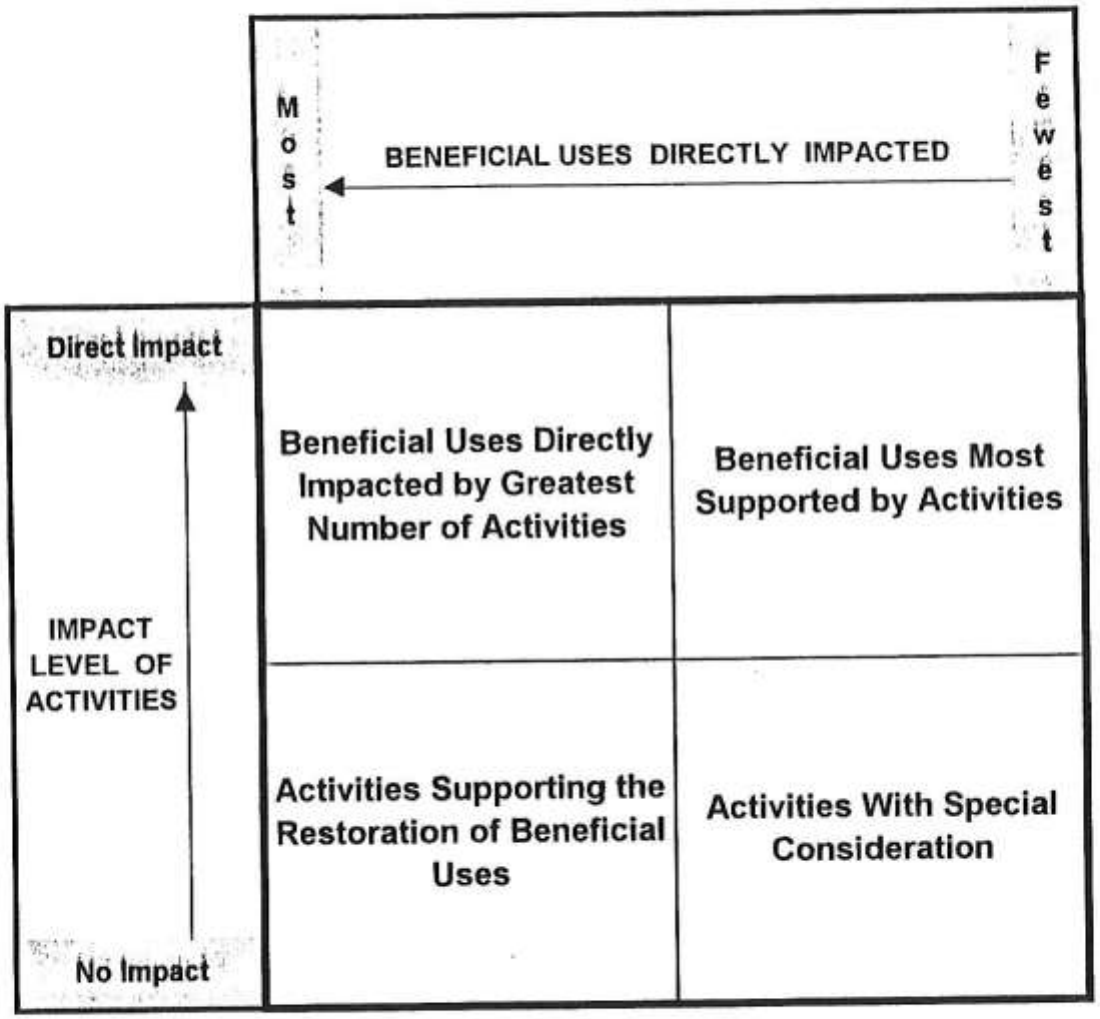
The Environmental Performance Partnership Agreement

Administrative & Agreed Orders; Consent Decrees Supporting RAP

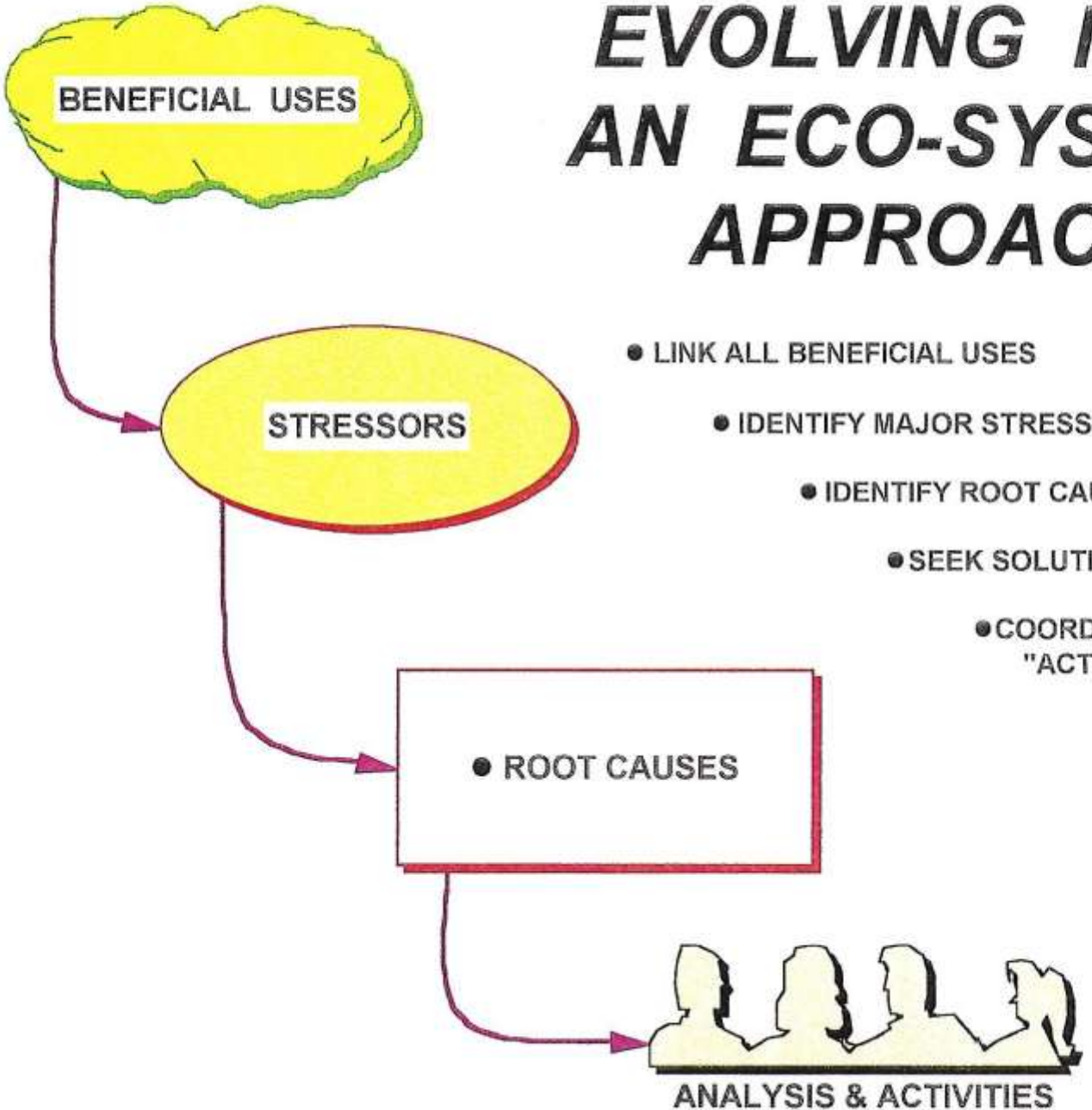
Additional Actions Necessary to Delist

● = Directly Related; ○ = Supportive; □ = Not Related

MATRIX ANALYSIS

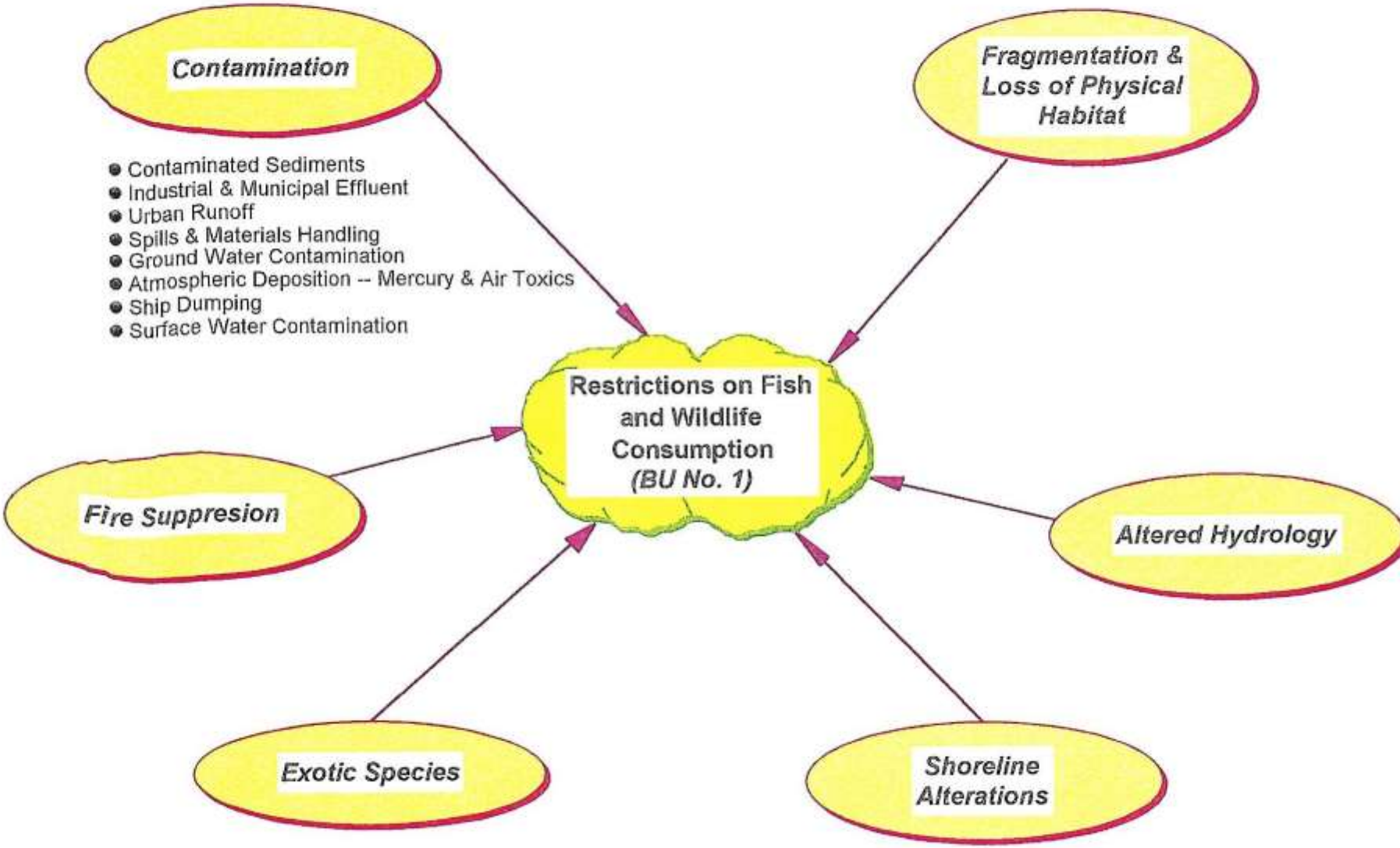


EVOLVING INTO AN ECO-SYSTEM APPROACH



- LINK ALL BENEFICIAL USES
- IDENTIFY MAJOR STRESSORS *"WEBS"*
- IDENTIFY ROOT CAUSES
- SEEK SOLUTIONS (Flow Chart)
- COORDINATE ACTIVITIES "ACTIVITY MATRIX"

THE STRESSORS & THEIR SOURCES (ROOT CAUSES) WHICH IMPAIR THIS BENEFICIAL USE



NOTE: Mercury and PCB's are the primary pollutants of concern

Remedial Action Plan Stage II.V
Working Documents

September, 1998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E
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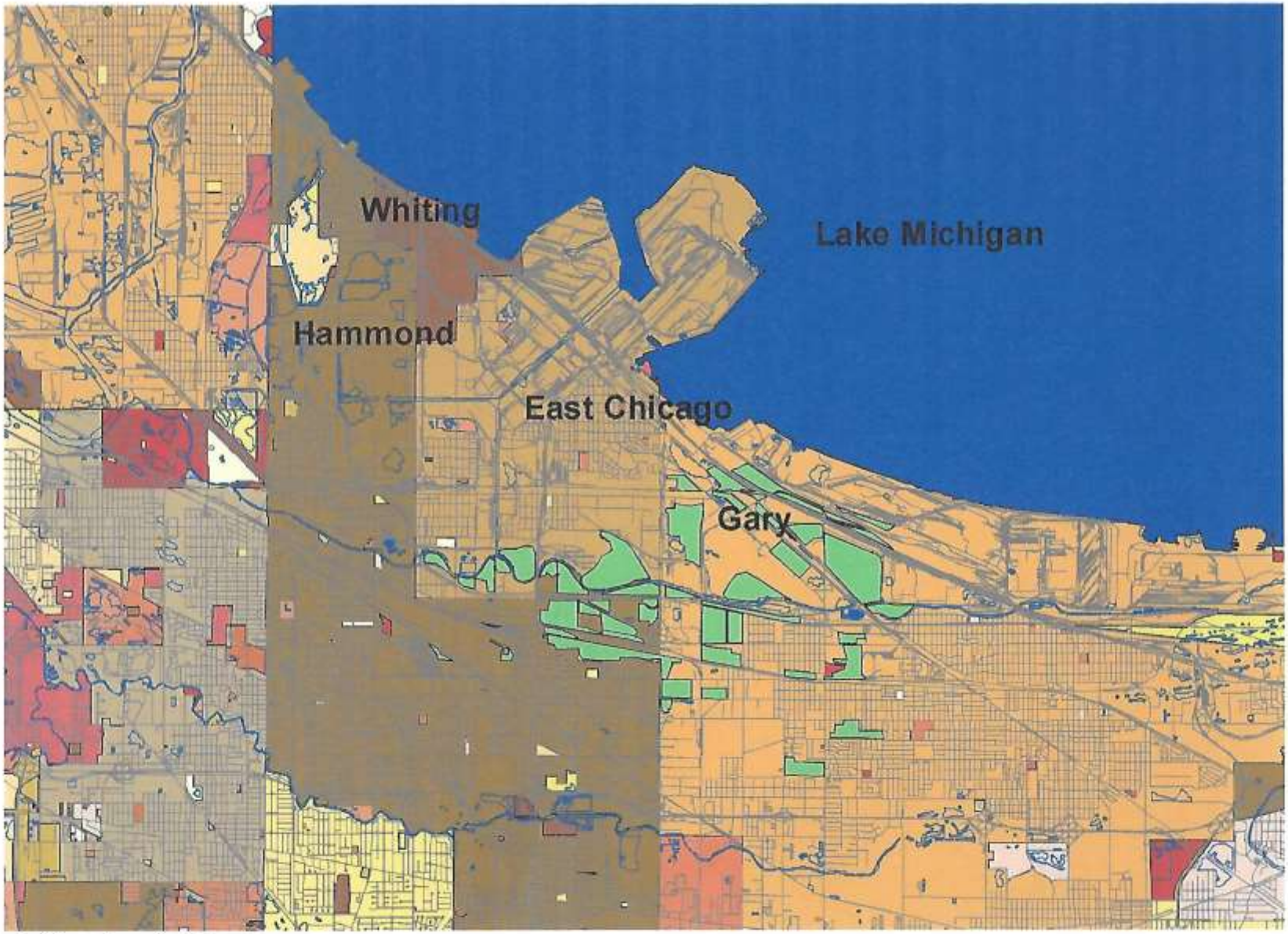
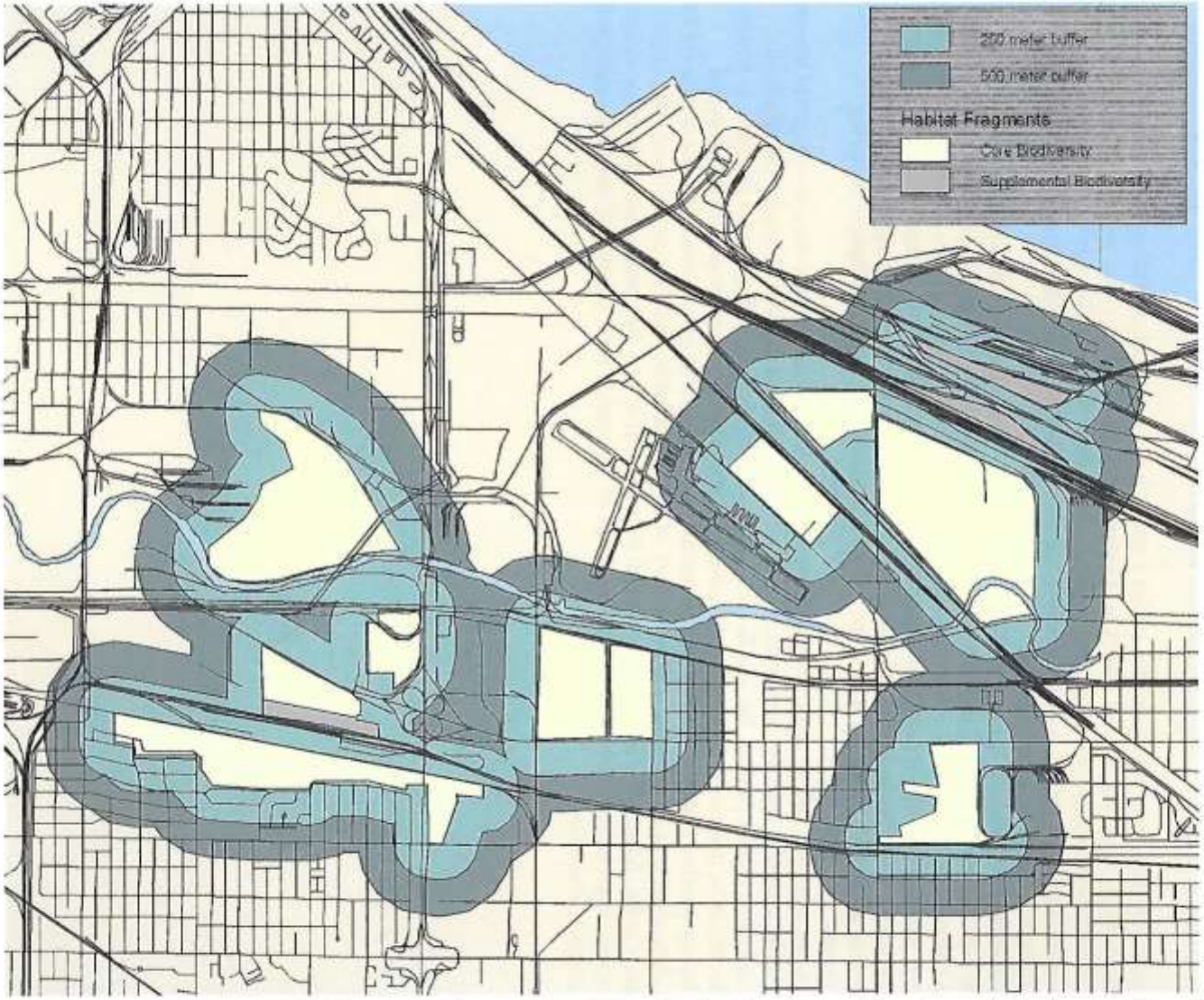
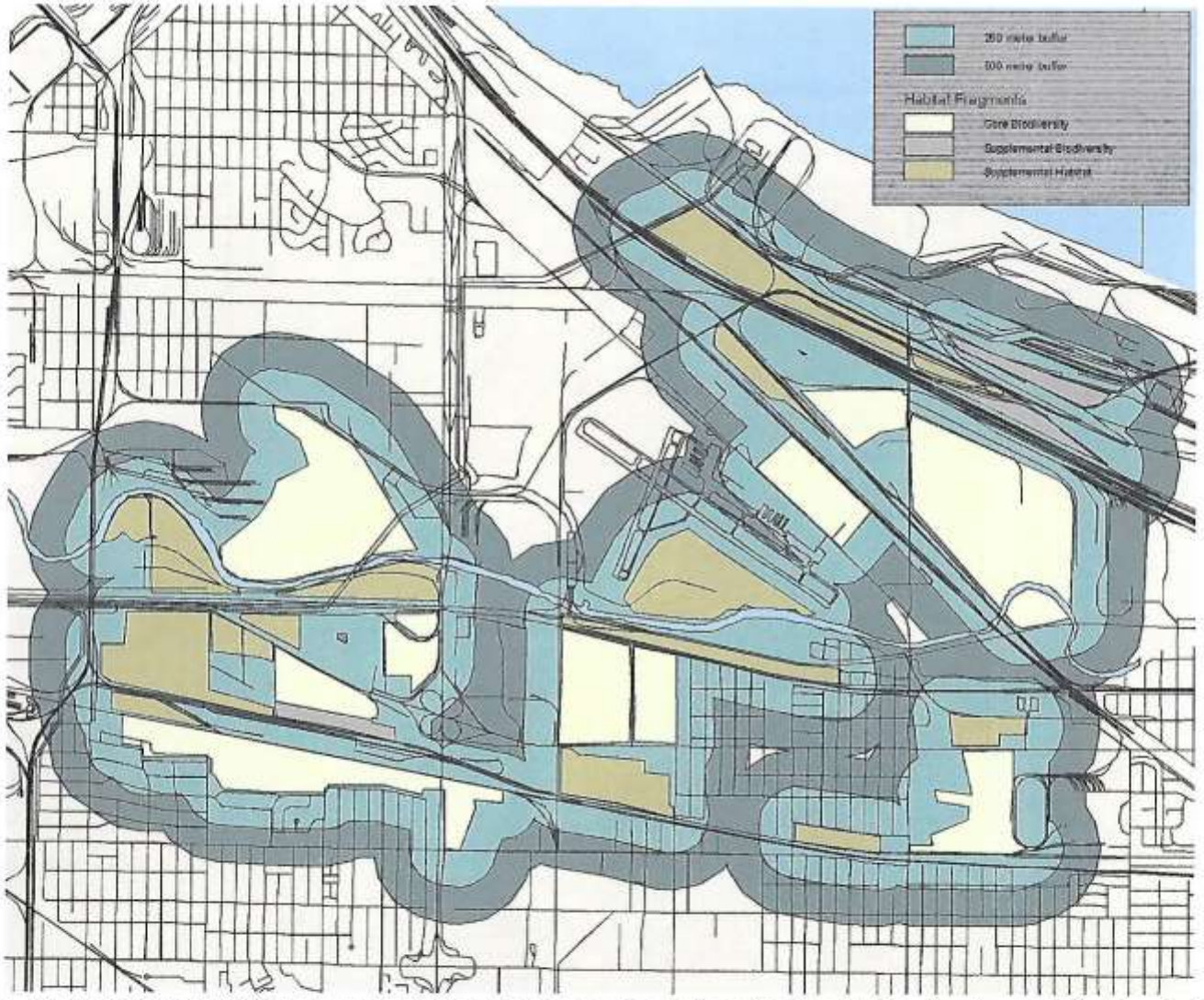


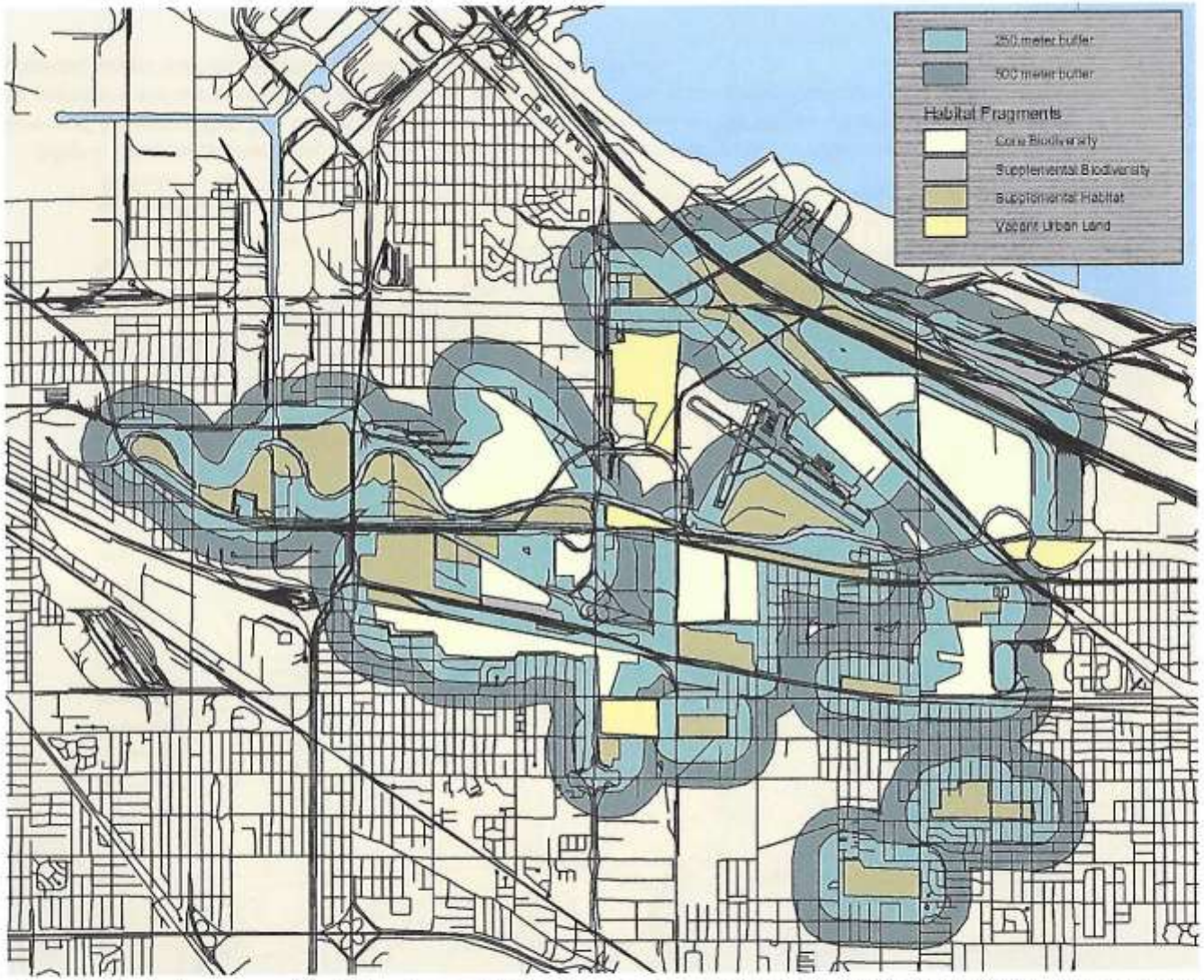
Map1. Overview of study area.



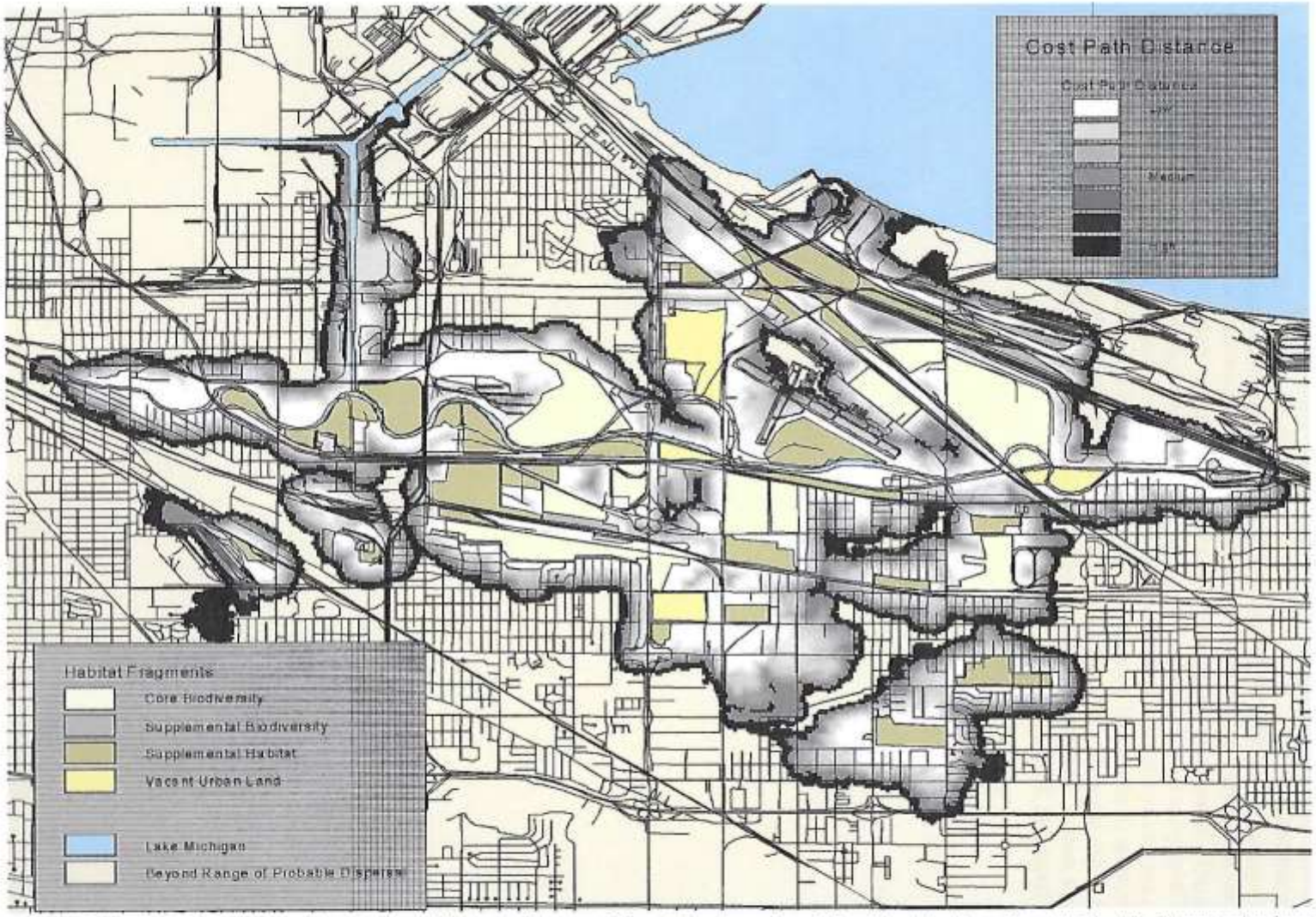
Map 3. Illustrates concentric 250 meter and 500 meter bands around each *Core Biodiversity Site and Supplemental Biodiversity Site* within 500 meters of a core site. This map clearly illustrates the potential range of connectivity between such sites. Core sites located within 500 meter of each other are likely to have adequate connectivity to sustain gene flow and metapopulation dynamics for many species.



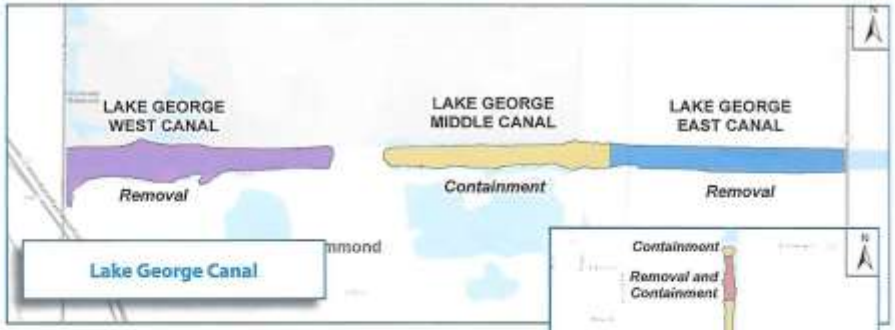
Map 4. Illustrates concentric 250 meter and 500 meter bands around each *Core Biodiversity Site, Supplemental Biodiversity Site*, and *Supplemental Habitat* within 500 meters of a core site. Core sites located within 500 meter of each other are likely to have adequate connectivity to sustain gene flow and metapopulation dynamics for many species. This map clearly illustrates improved connectivity and expanded range for the conservation targets with the addition of selected *Supplemental Habitat*.



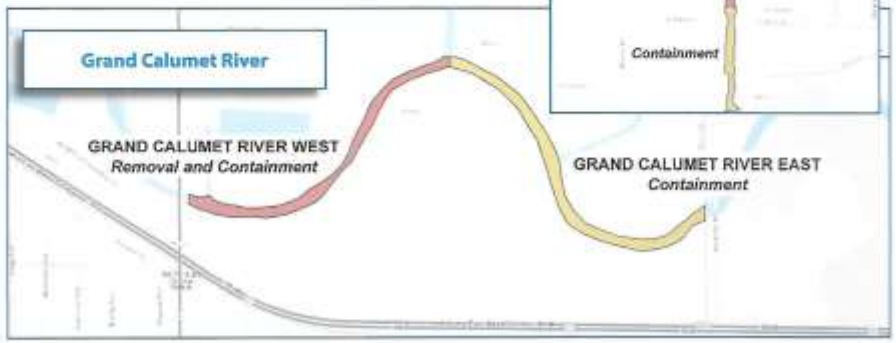
Map 5. Illustrates concentric 250 meter and 500 meter bands around each *Core Biodiversity Site, Supplemental Biodiversity Site,* and *Supplemental Habitat.* Core sites located within 500 meter of each other are likely to have adequate connectivity to sustain gene flow and metapopulation dynamics for many species. This map clearly illustrates improved connectivity and expanded range for the conservation targets with the addition of all *Supplemental Habitat* identified in this plan.



Map 6. Illustrates least-cost paths optimized for aquatic/terrestrial vertebrates such as Blanding's turtle and spotted turtle. It may also have validity for other animals likely to disperse along wetlands and aquatic habitats, such as dragonflies and damselflies. Lighter areas represent likely migration corridors, while black delineates maximum dispersal distance. As this figure illustrates, the Calumet River may serve as an excellent east-west corridor for dispersal for such animals. The Calumet River corridor may be especially useful for connectivity between habitats north east of the airport and those to the west.



The figures on this page show the type of cleanup that will be done in each area of the river and canal.



Project funding

Funding planning and design

In December of 2013, the District signed a Project Agreement with EPA under the Great Lakes Legacy Act. The purpose was to study, propose options and select a cleanup design of polluted sections of the Grand Calumet River and Indiana Harbor Ship Canal.

Funding a cleanup

Moving forward, a new Project Agreement must be signed to fund the cleanup of the waterways. The project team is looking for partners. Anyone interested in entering into a partnership agreement should contact Fernando M. Treviño, ECWMD Executive Director, at 219-741-7714 (mobile), or fmtconsulting@aol.com or Brenda Jones, 312-886-7188, or jones.brenda@epa.gov.

Cleanup schedule

EPA and its project partners will decide on the cleanup schedule once funding for the project is available

At this time, the District and EPA will plan meetings to give more information about future activities.

Under the GLLA, EPA can provide up to 65 percent of the cost of sediment cleanup and restoration work. The rest comes from cities, states, businesses and other nonfederal partners. EPA's partners can provide funding as money or as allowable "in-kind" contributions. In-kind contributions are services or products provided by an organization, such as property access, water treatment or landfill space.

The table below summarizes the action for each section and the estimated cost.

	East Chicago				Hammond	
	Grand Calumet River East	Grand Calumet River West	Indiana Harbor Canal	Lake George Canal East Section	Lake George Canal Middle Section	Lake George Canal West Section
Action	Containment	Removal (32,000 cubic yards) and Containment	Removal (30,000 cubic yards) and Containment	Removal (60,000 cubic yards)	Containment	Removal (122,000 cubic yards)
Cost	$6.2 million	$9.9 million	$15 million	$8.2 million	$9.7 million	$11.8 million

For more information

Project-related documents are available on the Web: www.in.gov/ecwmd/

For more information on other sediment work in the Grand Calumet River visit *www.greatlakesmud.org*.